

Important Advances in Clinical Medicine

Epitomes of Progress—Allergy

The Scientific Board of the California Medical Association presents the following inventory of items of progress in Allergy. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in Allergy which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Allergy of the California Medical Association and the summaries were prepared under its direction.

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Occupational Causes of Asthma

EXPOSURE TO A NUMBER of irritating materials can produce paroxysms of asthma. In many instances, patients have a predisposition toward asthma. However, some materials seem capable of producing bronchial irritation and wheezing in patients who have had no previous respiratory difficulties.

Metal fumes, such as those from nickel and chromium, are well known for their ability to produce asthma and skin eruptions.

Toluene di-isocyanate (TDI) is an ingredient in the manufacture of polyurethanes. Polyurethanes are used in cushioning materials, insulation, varnishes and paint. Exposure to TDI can produce severe asthma. We have been particularly impressed with the frequency of asthma in automobile spray painters exposed to TDI.

Many patients, including some who are hairdressers, note exacerbation of asthmatic symptoms on exposure to hair spray preparations. A recent study has shown acute reversible narrowing of the small airways of healthy persons after exposure

to hair spray. Studies were not done in asthmatic persons, but statements from patients would indicate that they may experience similar problems.

We have recently observed a number of meat wrappers with work-related respiratory symptoms. In addition to lacrimation and rhinorrhea, patients experience wheezing, coughing and dyspnea associated with cutting a polyvinyl chloride (PVC) meat wrap with a hot wire. Most, but not all, of the affected workers are cigarette smokers. A few are allergic and have had asthma in the past, but most have noted symptoms only after working with the hot wire cutting method. Antihistamines or bronchodilators (or a combination) and absence from work usually relieve the symptoms. The known chemical breakdown products of PVC include traces of such potent respiratory tract irritants as phosgene and hydrochloric acid. It is not known whether these materials are responsible for the difficulties.

This listing of occupational associations with asthma is by no means complete. It serves, however, to emphasize to physicians that a careful occupational history should be taken in all patients